

State of Montana

Montana Lottery IT Strategic Plan 2016

Table of Contents

1. Executive Summary	3
2. Environment, Success, Capabilities	4
3. IT Contributions and Strategies	5
4. IT Principles	5
5. IT Governance	6
6. IT Financial Management	6
7. IT Services and Processes	6
8. IT Infrastructure, Staffing, Resources	7
9. IT Risks and Issues	8
10. IT Goals and Objectives	9
11. IT Projects	10
12. Security and Business Continuity Programs	11
13. Planned IT Expenditures	12
14. Administrative Information	12

1. Executive Summary

The Montana Lottery was created by a vote of the people in 1986. Since then, it has paid more than \$483 million in prizes and returned more than \$224 million to the State of Montana for State programs as determined by the Legislature.

The Lottery offers two types of products – terminal issued lotto games and scratch games. In addition, the Lottery, through an agreement with the Montana Board of Horse Racing, facilitates Fantasy Sports gaming under the umbrella of Montana Sports Action (MSA). The Lottery's retail base has increased to 946 retailers. In an economy where most other lottery jurisdictions have struggled to stabilize sales, game innovation and the expanded retailer base have led to continual increases in Lotto and Scratch sales year after year, as well as continued growth in transfers to the General Fund each year.

We continue to revitalize our suite of terminal-generated instant win games called Treasure Play, Retailers with a gaming license utilize convenient player activated terminals. Players can select and purchase tickets themselves for the various Treasure Play games. They can also purchase their favorite Montana Sports Action games as well as any of our traditional terminal issued Lotto games.

We have also added player activated terminals that also dispense Scratch tickets at many retail locations. These player activated terminals enable players to purchase both types of lottery products even when the retailers' customer service desks are closed.

The Lottery continues to make retailer recruitment a top priority resulting in increased terminals of all types.

- Clerk operated terminals: 628
- Player activated terminals that also dispense scratch tickets: 60
- Small-footprint player activated terminals: 318

The Lottery has completed the request for proposal process for the Lottery central gaming system and a new contract is in place as of March 31, 2016. Even though this was a significant procurement action, it was not considered an EPP action because no funds are requested from the Legislature for this contract. The contractor is paid a percentage of sales during the life of the contract for all services. With the new contract the Lottery is poised to double the number of player activated terminals. Additionally, the small-footprint player activate terminal technology has advanced to incorporate a clerk mode, thus eliminating the need for the additional clerk terminal at retail locations where counter space is at a premium.

The integrity of the Lottery Operating System is paramount. There are numerous checks and balances in all systems. One such system is the Internal Control System (ICS). This is an independent system totally separated from the rest of the Lottery central gaming system. It is used to verify, through an independent computation, total drawing sales and numbers of winners for each of our Lotto games.

We continue to expand the Player's Club membership by integrating Lotto and Scratch tickets with Player's Club rewards by use of a bonus entry on designated tickets. This allows players to register for second chance drawings when offered and chances to win cash prizes, Lottery products, and other prize giveaways.

With the use of a new mobile application, members can create an electronic playslip (e-Playslip) to select and organize their favorite numbers. Players simply scan the barcode on their mobile device at any retailer terminal to produce their Lotto tickets. Included with the new Lottery central gaming system contract is a complete refresh of the Montana Lottery website, Player's Club, mobile application, and the

addition of a Retailer Portal where participating retailers will be able to easily query and access their own accounting data.

The Montana Lottery continues to keep software and hardware systems aligned with the needs of the users, State standards, available budget dollars and the latest technology.

2. Environment, Success, and Capabilities

The mission of the Montana Lottery is to maximize the transfer of its net revenue to the state's General Fund by providing products that meet the expectations of consumers and the state of Montana while adhering to the highest standards of security and integrity, which is critical to maintaining public confidence in the agency and its products.

The Montana Lottery is an enterprise fund, which means that its operations are financed and operated in a manner similar to private enterprise where the intent is to provide goods or services to the general public. That is, the Lottery receives no funding from the State of Montana but rather generates money for the State's General Fund. As with any business, the Lottery's net revenue -its "profit" -is defined as the excess of revenues over expenses. That "profit" is transferred to the State's General Fund. In order to maximize this transfer the Montana Lottery will introduce new games, update existing games, and control operating expenses.

While maximizing net revenues the Lottery must always maintain public trust in Lottery games and products. The Montana Lottery has established and maintains an extensive security system that governs all aspects of the games it offers. This system is under continuous review, and upgrades are instituted whenever appropriate.

Public trust in Lottery games and products also means the Montana Lottery must provide excellent service to players and to the retailers who sell our products. The Montana Lottery will continue to offer games that players want to play and to maintain convenient locations for ticket purchases. The Lottery works closely with its retail outlets to provide point-of-sale and display materials, inventory control, and technical assistance.

MONTANA LOTTERY OBJECTIVES

Maximize transfer to General Fund

Maintain public trust in Lottery games and products

Provide excellent service to players and retailers who sell our products



MONTANA LOTTERY BUSINESS REQUIREMENTS

Introduce new Lottery games while also revitalizing existing games

Recruit new retailers to sell Lottery products

Control operating expenses

Ensure the integrity of the Lottery Operating System is not compromised

Provide up to date product delivery solutions and services

3. IT Contributions and Strategies

The Montana Lottery IT strategy is designed to support the Montana Lottery's primary objectives and business requirements. Not all IT programs and projects will address all of the business requirements, but all IT programs and projects will support at least one. The IT department provides the Montana Lottery with technical support to accomplish all their duties. Additionally the IT department manages the Internal Control System, which maintains the integrity of the Lottery central gaming system. The IT department also coordinates all system related activity with the Lottery central gaming system contractor.

The IT department's strategy to contribute to the Montana Lottery's success is defined in the table below.

MONTANA LOTTERY OBJECTIVES

Maximize transfer to General Fund

Maintain public trust in Lottery games and products

Provide excellent service to players and retailers who sell our products

MONTANA LOTTERY BUSINESS REQUIREMENTS

Introduce new Lottery games while also revitalizing existing games

Recruit new retailers to sell Lottery products

Control operating expenses

Ensure the integrity of the Lottery Operating System is not compromised

Provide up to date product delivery solutions and services

MONTANA LOTTERY IT STATEGIES

Develop technical specifications to support new or changing Lotto games

Manage and test all Lottery Operating System modifications

Operate the Lottery's Internal Control System

Implement technology and security enhancements to remain current with government and Lottery industry standards

Provide agency with state of the art technology and support

Ensure retailers are provided state of the art technology and support

4. IT Principles

IT principles govern Montana Lottery IT department's activities, decisions and operations. They provide touch-points and guidelines to ensure that the correct decisions are being made; decisions that will provide the greatest value to Montana's citizens and Montana Lottery employees, retailers and players. Many of the Montana Lottery IT department's principles have their roots in the principles outlined in Montana's State Strategic Plan for IT 2016.

 Resources will be allocated to the IT projects that contribute the greatest net value and benefit to stakeholders.

- Unwarranted duplication will be minimized by sharing data, IT infrastructure, systems, applications and IT services.
- Information technology will be used to create quality jobs, a favorable business climate, improve government, protect individual privacy and protect the privacy of IT information.
- IT resources will be used in an organized, deliberative and cost-effective manner.
- IT systems will provide delivery channels that allow citizens to determine when, where, and how they interact with state agencies.
- Mitigation of risks is a priority to protect individual privacy and the privacy of IT systems information.
- Lottery central gaming system technology will incorporate security controls based on federal National Institute of Standards and Technology (NIST) security standards

5. IT Governance

Governance for the Montana Lottery rests with the Montana State Lottery Commission. The Commission consists of five members appointed by the Governor. The Commission receives input from the Director of the Montana Lottery who is also appointed by the Governor. The Deputy Director for Security is appointed by the Lottery Director. All other employees are hired by the Lottery Director. This structure can be found in the Administrative Rules of the State of Montana.

Lottery product changes are defined by the Sales and Marketing department in coordination with the IT department and all other departments affected by the change. All changes must be approved by the Director and then forwarded to the Commission for their approval as well.

Other changes are defined by the department head or designee requesting the change or resolution. This information is relayed to the IT department where it is succinctly defined and managed. Governance for daily business needs rests with the Lottery Directors utilizing subject matter experts where appropriate.

6. IT Financial Management

The Montana Lottery is an enterprise fund, which means that its operations are financed and operated in a manner similar to private enterprise where the intent is to provide goods or services to the general public. That is, the Lottery receives no funding from the State of Montana but rather generates money for the state General Fund. As with any business, the Lottery's net revenue -its "profit" -is defined as the excess of revenues over expenses. That "profit" is transferred to the State's General Fund.

7. IT Services and Processes

The Montana Lottery IT department's service strategy is to offer the agency with a wide range of cost effective technical support that maximizes agency productivity while minimizing resource time and effort. The scope of the Montana Lottery IT department's service offerings is very similar to peer state lottery IT departments. The Montana Lottery IT department's catalog of services includes:

 Network Services: data and voice transport, internet access, LAN and wiring services, wireless, VPN

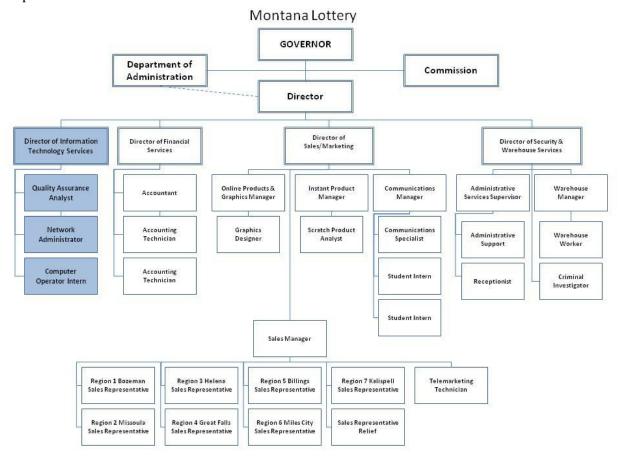
- Professional Services: Lottery software project management, database management, desktop support and management
- Software Specification Development: Lottery game and application specification development
- Hosting: internal control servers, file storage and backup
- Lottery central gaming system contract management
- IT oversight, security risk management, and policy enforcement
- Continuity of Lottery operations

8. IT Infrastructure, Staffing and Resources

The Montana Lottery contracts out the responsibility for our Lottery central gaming system, terminals, communications network, 24/7 Hotline support service, and back office management systems through the Montana Procurement Office controlled formal bidding process. The current contractor is INTRALOT USA whose contract expires on March 31, 2023, with an additional three - one (1) year extensions available to the Lottery. The clustered primary operational servers for the Lottery central gaming system are physically located in a restricted access facility in Duluth, Georgia. An identical clustered system for disaster recovery (or backup) is located in at the INTRALOT office in Helena, Montana. In addition to this infrastructure, two independently controlled systems which function as a pass through recording system are located in two separate facilities in Helena, Montana. Communications from the central system to the 946 retail locations are through closed circuit satellite connections provided by SPACENET and/or high speed cellular private networks. The Lottery central gaming system is managed from the INTRALOT operations center in Duluth, Georgia.

The Montana Lottery also houses the Lottery central gaming system's primary internal control system in a data center located in the Montana Lottery office, along with the agency's network server and ancillary networking equipment. A secondary internal control system is located at the INTRALOT facility in Helena along with a complete Lottery Operating System test environment including all backend systems, an internal control system and all terminal types available in the field.

The Montana Lottery has approximately 32 FTEs organized on a functional basis. The Montana Lottery IT department consists of 3.5 FTEs



The Montana Lottery contracts out the responsibility for our Lottery Operating System, terminals, communications network and back office management systems through the Montana Procurement Office controlled formal bidding process. The current contractor is INTRALOT USA whose contract expires on March 31, 2023, with three – one (1) year extensions available to the Lottery. The internal control system is also part of this contract bidding process. The current internal control system is developed and maintained by ELYSM CONSULTING, INC.

9. Risks and Issues

The following table contains the major risks to the Montana Lottery IT strategy. Major risks meet one of two criteria.

- Risks with a probability of medium or high with an impact of high.
- Risks with a probability of high with an impact of medium or high.

Mitigation strategies are the pro-active actions that the Montana Lottery is using to lessen the probability of the risk occurring and minimizing the impact of the risk.

Primary Risk Probability	Impact	Mitigation Strategy
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Loss of Staff	Medium	High	The Montana Lottery IT department runs with a small staff. Each position will maintain a position procedural manual, with all position responsibilities and duties clearly defined and documented.
Security breach	Medium	High	Our agency has an active security program including, but not limited to, staff training and awareness, data encryption, closed network environment for Lottery transactional data, and security policies.
Lottery central gaming system integrity compromise	Medium	High	Specifications will be defined clearly and concisely. Requirements will be thoroughly reviewed, testing procedures defined and executed accurately and with transparency to allow for problem recognition and prompt resolution.
Internal control system integrity compromise	Medium	High	Specifications will be defined clearly and concisely. Requirements will be thoroughly reviewed, testing procedures defined and executed accurately and with transparency to allow for problem recognition and prompt resolution.
Lottery central gaming system equipment failure	Medium	High	Contractor procedures will be maintained and reviewed for accuracy. The Lottery will continue to test the contractor failover process semiannually to ensure procedure and functionality are current and successful.

10. IT Goals and Objectives

The Montana Lottery and Lottery central gaming system contractor have been successfully certified by the North American Association of State and Provincial Lotteries (NASPL) for Best Practices in:

- Quality Assurance of Product Development in the Lottery Industry:
 - o Requirements Definition
 - Development Process
 - Acceptance Testing

These standards, documentation, and further information can be found at https://collaboration.opengroup.org/naspl/

The major business drivers for implementing the Best Practices for Quality Assurance of Product Development in the lottery industry are the potential for reduced risk and increased integrity for the Montana Lottery, reduction in development costs, decreased potential for lost revenue, and decreased rate of potential project failure.

Recertification for these best practices will continue to improve the quality and integrity of the Lottery environment, and provide increased efficiencies, resulting in reduced costs and increased profit margins for the Montana Lottery, contractors, and retailers.

11. IT Projects

The Lottery has no major IT projects scheduled beyond the completion of the conversion effort for the Lottery central gaming system contract started on March 31, 2016, as well as the completion of the third party conversion testing deliverables started in November 2015.

The new contract for the Lottery central gaming system has been approved and signed by the State CIO and is in place as of March 31, 2016. Even though this is a major procurement action, it is not considered an EPP action because no funds are requested from the Legislature. The contractor is paid a percentage of sales during the life of the contract for all services.

Item	Description
Project name	Montana Lottery Central Gaming System and Related Services
Project/program purpose and objectives	The Lottery Operating System contract provides the Montana Lottery with the latest technology and services available to the lottery industry in order to remain current, efficient and competitive.
Estimated start date	The present contract expires on March 30, 2023, with three – one (1) year extensions available to the Lottery.
Estimated cost	The cost is part of the competitive bidding process. The contractor is paid a percentage of sales during the life of the contract for all services. The current contract percentage is 8.49% of each sales dollar.
Funding source - 1	No funds will be requested from the Legislature. The contractor is paid a percentage of sales during the life of the contract for all services.
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	

The Montana Lottery has hired Lottery industry experienced professionals to facilitate third party conversion testing through the Montana Procurement Office controlled formal bidding process. With a new Lottery central gaming system contract conversion taking place, the third party functional product planning, scripting, and testing has helped the Montana Lottery ensure the utmost integrity for this project.

Item	Description			
Project name	Third Party Conversion Testing			

Project/program purpose and objectives	The third party conversion testing contract will provide the Montana Lottery with the greatest assurance of the integrity of the new Lottery central gaming system.
Estimated start date	The start date coincided with the new contract Lottery central gaming system product deliverables ready for test in November 2015.
Estimated cost	The cost is part of the competitive bidding process. An EPP item for \$200,000 was assessed. The successful bidder's final cost was \$190,000.
Funding source - 1	The budget allocation was OTO per approval of the 2015 Legislature.
Funding source - 2	
Funding source - 3	
Annual Costs upon completion	

12. Security and Business Continuity Programs

As a State Agency attached to the Montana Department of Administration for support the Montana Lottery actively participates in the DOA COOP planning process. The basic goal of this effort is to allow the Montana Lottery and other agencies a way to develop an interrelated standard template to use for consistent development of the overall State of Montana plan. If maintained properly, this effort will result in a tested document that will allow for the continuance of critical State functions, systems, and services when a disruption occurs after a disaster or emergency situation. The Montana Lottery Director has designated the Montana Lottery Security Director as the primary individual responsible for this work. In addition to this effort the Montana Lottery also maintains a separate COOP/Disaster plan which is tailored specifically to Montana Lottery Operations, contractor support and retailer support requirements. RFP releases made on behalf of the Montana Lottery contain requirements for COOP planning by respondents. All systems and operational areas of the Montana Lottery main office are supported by generators and uninterrupted power systems to provide backup power. These power backup systems are capable of sustaining operations one week without refueling.

INTRALOT is the current contractor for the Lottery Operating System and they are required by contract to maintain an updated business continuity plan that is reviewed by the Montana Lottery Security section semiannually. As stated previously the system was designed utilizing server clusters which stores data on a continual basis. The primary configuration is located in INTRALOT's corporate operations center in Duluth, Georgia and the secondary configuration is in INTRALOT's local office located in Helena, Montana. These clusters are under constant visual and logical monitoring from the INTRALOT corporate operations center in Duluth, Georgia and Montana Lottery Security staff. The network also utilizes satellite based communications and/or private cellular networks with multiple backups so interruption of State procured hard wired services is not a concern. Exposure to local environmental and geological risks

is minimal since the entire communications network can be operated from Duluth, Georgia or Helena, Montana. All systems and operational areas of Montana linked INTRALOT operations in Duluth and Helena are supported by generators and uninterrupted power systems to provide backup power. These power backup systems are capable of sustaining operations indefinitely with refueling.

13. Planned IT Expenditures

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
IT operating expenses	\$240,000	\$240,000	\$240,000	\$240,000	\$260,000	\$260,000
IT initiatives	\$100,000	\$90,000	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$430,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000

14. Administrative Information

IT strategy and plan owner: Angela Wong, Lottery Director

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